

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-24 (canceled).

25. (new): A method of producing a Group III nitride semiconductor device having a chip shape which is a pentagonal or more highly polygonal shape, comprising a first step of epitaxially growing a Group III nitride semiconductor on a substrate to form a semiconductor wafer; a second step of irradiating said semiconductor wafer with a laser beam to form separation grooves; a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the second step irradiates the laser beam from the semiconductor side of the semiconductor wafer, and after the second step, further including a fifth step of forming trenches, in which at least the n-type layer is exposed, being corresponded to the positions for forming the separation grooves.

26. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the first step, the second step, the third step and the fourth step are included in this order.

27. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the separation grooves are at least partly reaching the substrate.

28. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the second step comprises a step of irradiating a laser beam from the semiconductor side of the semiconductor wafer and a step of irradiating a laser beam from the substrate side of the semiconductor wafer.

29. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the separation grooves have a V-shape in the cross section.

30. (new): A method of producing a Group III nitride semiconductor device having a chip shape which is a pentagonal or more highly polygonal shape, comprising a first step of epitaxially growing a Group III nitride semiconductor on a substrate to form a semiconductor wafer; a second step of irradiating said semiconductor wafer with a laser beam to form separation grooves; a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the second step forms a separation groove of the form of a polygonal line that is bent, forms a plurality of separation grooves of the form of a polygonal line that is bent in a form of being translated in parallel and, then, forms linear separation grooves by connecting every other bending points of the neighboring separation grooves of the form of a polygonal line.

31. (new): A method of producing a Group III nitride semiconductor device having a chip shape which is a pentagonal or more highly polygonal shape, comprising a first step of epitaxially growing a Group III nitride semiconductor on a substrate to form a semiconductor wafer; a second step of irradiating said semiconductor wafer with a laser beam to form separation grooves; a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of

division into individual chips by applying stress to said separation grooves, wherein the second step forms first separation grooves of the form of a broken line, forms second separation grooves of the form of a broken line that intersect the first separation grooves of the form of the broken line at a first angle, and forms third separation grooves of the form of a broken line that intersect the second separation grooves of the form of the broken line at a second angle and further intersect the first separation grooves of the form of the broken line at a third angle, the sum of the first angle, the second angle and the third angle being 180 degrees.

32. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the thickness of the semiconductor wafer is ground and/or polished at the third step to be not larger than 150 μm .

33. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the fourth step is executed by pushing the substrate onto a spherical metal mold.

34. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the chip shape is substantially an orthohexagonal shape.

35. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the chip shape is substantially a pentagonal shape.

36. (new): A method of producing a Group III nitride semiconductor device having a chip shape which is a pentagonal or more highly polygonal shape, comprising a first step of epitaxially growing a Group III nitride semiconductor on a substrate to form a semiconductor wafer; a second step of irradiating said semiconductor wafer with a laser beam to form separation grooves; a third step of grinding and/or polishing the main surface side

different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the chip shape is substantially a pentagonal shape and the second step forms separation grooves of the hexagonal shape by forming separation grooves of the form of a polygonal line that is bent, forming separation grooves of the form of a plurality of polygonal lines that are bent in a form of being translated in parallel and, then, forming linear separation grooves by connecting every other bending points of the neighboring separation grooves of the form of polygonal lines and, further, forms linear separation grooves connecting the opposing two sides of the separation grooves of said hexagonal form.

37. (new): A method of producing a Group III nitride semiconductor device having a chip shape which is a pentagonal or more highly polygonal shape, comprising a first step of epitaxially growing a Group III nitride semiconductor on a substrate to form a semiconductor wafer; a second step of irradiating said semiconductor wafer with a laser beam to form separation grooves; a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the chip shape is substantially a pentagonal shape and the second step forms separation grooves of the form of the hexagonal shape by forming first separation grooves of the form of a broken line, forming second separation grooves of the form of a broken line that intersect the first separation grooves of the form of the broken line at a first angle, and forming third separation grooves of the form of a broken line that intersect the second separation grooves of the form of the broken line at a second angle and further intersect the first separation grooves of the form of the broken line at a third angle, the sum of the first angle, the second angle and the

third angle being 180 degrees and, further, forms linear separation grooves connecting the opposing two sides of the separation grooves of said hexagonal form.

38. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the chip is substantially of a circular form.

39. (new): A method of producing a Group III nitride semiconductor device according to claim 25, wherein the Group III nitride semiconductor device is a light-emitting device.

40. (new): A method of producing a Group III nitride semiconductor device according to claim 39, wherein the first step forms the semiconductor wafer by epitaxially growing an n-type layer, a light-emitting layer and a p-type layer comprising the Group III nitride semiconductor in this order on the substrate.

41. (new): A Group III nitride semiconductor light-emitting device produced by a production method of claim 39.

42. (new): A Group III nitride semiconductor light-emitting device produced by a production method of claim 40.

43. (new): A lamp comprising a light-emitting device of claim 41.

44. (new): A lamp according to claim 43, wherein a light energy conversion material is arranged more on the end portion than on the center of a semiconductor chip forming a light-emitting device.